

water lasts for a long time in the summer. The fishermen and country people of the mentioned localities appeared to me not to be acquainted with the animal.

Molge italica is very closely allied by the structure of its skull both to the typical *M. vulgaris* and subsp. *meridionalis*. The skull of *M. italica* is stouter, the interorbital space is constantly larger than in *M. vulgaris*, being contained twice and two-thirds, never thrice (as in *M. vulgaris*), in the length of the skull. The fronto-orbital processes are more developed, being longer, stouter, and directed more outwardly than in *M. vulgaris*. The ligamentous portion of the fronto-squamosal arch is more reduced here, so that we may consider *M. italica* as a true transitional form between *M. vulgaris* and the allied species with the fronto-squamosal arch bony.

The new species is easily recognizable from its allies, both from the species with a dorsal crest (*M. vulgaris*, *palmata*) or those without (*M. bosce*, *montandoni*), by the presence in both sexes of a well-marked dorsal longitudinal groove, while even in the allied species without dorsal crest both the males and females are provided with a straight and low cutaneous dorsal ridge¹.

The excellent Plate, drawn by Mr. Smit, under the kind supervision of my friend Mr. Boulenger, to both of whom I beg to tender my best thanks, shows so well the characters of the species that I need not insist on other differences in the coloration which can be easily noticed between *M. italica* and its allies.

5. On some Spiders from Savoy. By the Rev. O. PICKARD-CAMBRIDGE, M.A., F.R.S., C.M.Z.S., &c.

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A small collection of Spiders made for me at the Chalet de Mélézes, near St. Gervais les Bains, Haute-Savoie, in July and August 1894, by Mr. A. W. Pickard-Cambridge, with others made in August 1896 and July 1897, contained examples of thirty-two species, one of which (of the genus *Gnaphosa*) appears to me to be undescribed. Another species, *Lycosa* (*Pardosa*) *riparia* C. L. Koch, is of great interest, as little seems to be known of it. M. Simon, in his great work on French Spiders, describes under that name a totally distinct form. Dr. Ludwig Koch has kindly sent me a reliable type of the true *L. riparia*, by which I have been able to determine the examples in the present collection.

Subjoined is a list of the species, with descriptions of the new *Gnaphosa* and of the *Lycosa riparia*.

¹ See the outlines of the body in the mentioned species given by Boulenger in his "Description d'une espèce nouvelle de Triton," Bull. Soc. Zool. France, 1880, pl. vii.

List of Species.

ARACHNIDA - ARANEIDEA.

DRASSIDÆ.

- Callilepis nocturna* Linn. Adult male.
Gnaphosa molesta, sp. n. Adult females.
Drassus troglodytes C. L. Koch. Adult females.
 „ *cupreus* Bl. Adult female.
 „ *lapidicolens* Walck. Adult and immature females.
Prothesima latreillii L. Koch. Adult female.
 „ *nigrita* Pall. Adult female.
Micaria pulicaria Sund. Adult female.

THERIDIIDÆ.

- Erigone dentipalpis* Wid. Adult males.
Tmeticus fortunatus Cambr. Adult male.—This is only the second record of this very distinct species. See Proc. Dorset Nat. Hist. and Antiq. Field-Club, 1895, vol. xvi. p. 123, pl. A. fig. 6.
Linyphia pusilla Sund. Adult female.
Microneta fuscipalpis C. L. Koch. Adult male.

EPEIRIDÆ.

- Epeira diademata* Clk. Adult males and immature females.
 „ *quadrata* Clk. Adult male and females.
 „ *ceropegia* Walck. Adult male and female.
Zilla alpina L. Koch. Female, immature.

THOMISIDÆ.

- Xysticus gallicus* Sim. Adult males and females.
 „ *cristatus* Clk. Adult male.
Philodromus alpestris L. Koch. Adult female.

LYCOSIDÆ.

- Tarentula andrenivora* Clk. Adult males.
 „ *pulverulenta* Clk. Adult male and female.
 „ *nemoralis* Westr. Adult male.
Trochosa leopardus Sund.
Lycosa amentata Clk.
 „ *cursoria* C. L. Koch. Adult male and female.
 „ *albata* L. Koch.
 „ *palustris* Linn. Adult males and females.
 „ *blanda* C. L. Koch. Adult males and females.
 „ *riparia* C. L. Koch. Adult males and females. Alt.
 5000 to 7000 feet.
Pirata latitans Bl.

SALTICIDÆ.

- Attus pictilis* E. Sim. Adult male.
Epiblemum scenicum Clk. Adult female.
 Several females of *Erigonini* were also in the collection, but in the absence of males the species are uncertain.

Descriptions of two Species.

GNAPHOSA MOLESTA, sp. n. (Figs. 1, 2.)

Adult female, length 3 lines (6 mm. nearly).

In general form, colours, and markings this spider closely resembles *Gnaphosa anglica* Cambr., but is much smaller, the female of that species commonly measuring 4 lines in length. The present spider is also much less hirsute, the fine prominent hairs covering the whole spider being fewer and shorter.

Fig. 1.

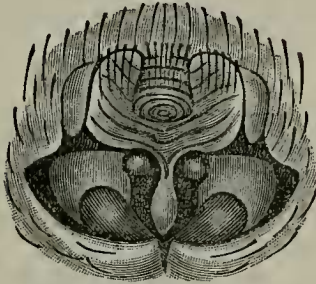


Fig. 2.

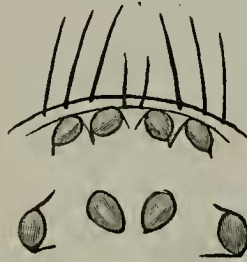


Fig. 1.—*Gnaphosa molesta*: epigyne (♀).

Fig. 2.— „ „ (♀): eyes from above and a little behind.

The cephalothorax, legs, falces, and palpi are of a yellow-brown ground-colour, the cephalothorax somewhat dusted with dark brown and having a strong V-shaped darker marking at the hinder end of the caput, also some dark converging irregular lateral lines on the thorax and a strongish marginal black-brown line. The legs have the femora dusted with dark brown, leaving some patches immaculate, and beneath the fore extremity of the tibiæ of the first and second pairs is a single spine, which I cannot observe in *G. anglica*.

The *maxillæ*, *labium*, and *sternum* are dark yellow-brown.

The position of the eyes is almost exactly similar in both species.

The *abdomen* is dark greyish-mouse-black and its hairy clothing short and close. The genital aperture somewhat resembles that of *G. anglica*, but the anterior obtuse process directed backwards is distinctly shorter.

This spider is possibly *G. leporina* of L. Koch, of which I have not been able to examine any authentic example, and it is less hazardous to describe it as new than to include it from the description alone as synonymous with at any rate a very nearly allied spider. M. Simon some years ago singled out a female from a lot of *G. anglica* I sent to him for examination, as a female of *G. leporina* L. Koch. I have re-examined this specimen very carefully and it is certainly only *G. anglica*. It did not appear that M. Simon had ever seen an authentic example of *Gnaphosa leporina* L. Koch, which has not yet been recorded from France, its localities being given as Transylvania, Germany, and Sweden.

Adult females were found at the Chalet Mélézes near St. Gervais

les Bains, near the end of July 1897, and again in August 1896. From this sex being not rare under stones, mostly with their egg-sacs, and no males being seen, it is probable that the season for the latter sex had passed.

LYCOSA (PARDOSA) RIPARIA C. L. Koch. (Figs. 3, 4.)

Adult male, length $2\frac{1}{2}$ lines (nearly 5 mm.).

In form, size, colours, and markings this spider closely resembles *L. pullata* Clk., so much so that M. Simon, to whom I submitted both sexes for examination, returned them to me under that name. Had M. Simon, however, closely inspected the male palpi and the female genital organs he would at once have seen their great difference from those of *L. pullata*.

Fig. 3.

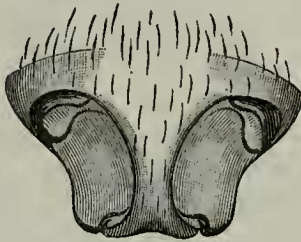


Fig. 4.

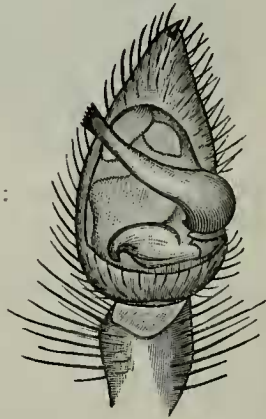


Fig. 3.—*Lycosa riparia*: epigyne (♀).

Fig. 4.— „ „ (♂): portion of palpus and palpal organs.

Cephalothorax deep brown, with three longitudinal yellow stripes or narrow bands—a central, two lateral, and a submarginal: the lateral stripes are rather irregular; the central stripe terminates at the beginning of the ocular area, and is rather broader in the middle than at the ends. Ocular area black.

Legs yellow, the femora more or less clouded and marked irregularly with deep brown and blackish; those of the fourth pair longest.

Palpi black, the radial and digital joints thickly clothed with short strong hairs; those of the outer side of the digital joint shortest and of uniform length. This joint is rather longer than the radial and cubital joints together, narrow-oval, and ending with a strongish, curved, nail-like claw. The palpal organs are highly developed. From the usual large basal lobe a long, strong, broad, curved, spiny, tapering, somewhat flat strap-like process on the inner side curves over obliquely to the outer side, a little beyond which its broadly and a little obliquely obtuse point projects freely; this point

is furnished with a few minute denticles or granulations. From beneath the base of this long curved process springs a small black, curved, sharp-pointed spine having the same general direction as the process. At the base of the palpal organs is a short, black, prominent, curved, corneous point rather directed backwards.

Abdomen dark blackish brown, much obscured by grey hairs; the markings in this sex almost obsolete, but resembling apparently those of the female.

The *female* is slightly larger than the male. The legs have the femora, tibiae, and (at least in one example) the metatarsi more or less, but not distinctly, annulated with brown; in another example the metatarsi were immaculate. The abdomen is clothed, principally on the sides and underneath, with greyish hairs; the upperside is slightly reddish yellow-brown. The central longitudinal marking is well indicated by a black margin, and its posterior extremity is truncated. The normal angular bars or chevrons between this and the spinners are indicated by two converging rows of black spots or markings continued obliquely on the sides by more or less indistinct lines of black spots.

Sternum dark yellow-brown, with a not very distinct, short, longitudinal, central, yellowish line. The genital aperture is large and of a very distinct and characteristic form, of which a drawing alone can give any adequate idea. Examples of each sex were found near St. Gervais les Bains at an altitude of over 6000 feet.

I have thought it well to give a figure of some dissections and a description of this spider, as there is some confusion in respect to its identity with the *Lycosa riparia* C. L. Koch (Simon, 'Aranéides de France'). An example of this latter spider kindly sent to me by M. Simon for examination is undoubtedly of a quite distinct species from a typical example sent to me by Dr. Ludwig Koch, and bears a closer resemblance in some points to *L. prativaga* L. Koch. M. Simon tells me he received it many years ago from Dr. L. Koch, as *L. riparia* C. L. Koch. There was probably a mistake here somewhere, but Dr. Koch assures me that about the typical example he has sent to me now recently there is no doubt whatever as to its being the true *L. riparia* of C. L. Koch. The *L. riparia* C. L. Koch—Kulczynski—from Austria, is nearly allied to, if not identical with, the type Dr. L. Koch sent to me. On an examination, however, of Kulczynski's type specimen there appeared to me some differences in the form of the palpus and in the structure of the palpal organs; I do not therefore feel quite certain about it. The spiders formerly recorded (Ann. & Mag. N. H. ser. 4, xvi. pp. 257-258, 1875; and 'Spiders of Dorset,' pp. 380-381, 1881) as *L. riparia* and *L. prativaga* in England are certainly all of one species—*L. prativaga* L. Koch (*vide* Proc. Dorset Nat. Hist. and Antiq. Field-Club, vol. xvi. p. 119, 1895).
